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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/644,742	NOETZOLD ET AL.
Office Action Summary	Examiner	Art Unit	
	Mary M. Gregg	4124	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on <u>13 February 2004</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-56</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-56</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>08/21/2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

MMG

DETAILED ACTION

1.   Claims 1-56 have been examined.

Specification

2.   The specification is objected to as failing to provide proper antecedent basis for

the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction

of the following is required:

        The subject matter of Claim 16 uses terminology "specific aspects" for which has

not been shown in the drawings or described in the detailed description preceding the

claims.

        In reference to the objections stated above for lack of antecedence in the

specification, according to MPEP 2111, the rules of the PTO require that application

claims must "conform to the invention as set forth in the remainder of the specification

and the terms and phrases used in the claims must find clear support or antecedent

basis in the description so that the meaning of the terms in the claims may be

ascertainable by reference to the description", 37 CFR 1.75 (d)(1). The claims as filed

in the original specification are part of the disclosure and therefore if an application as

originally filed contains a claim disclosing material not disclosed in the remainder of the

specification, the applicant may amend the specification to include the claimed subject

matter.

        The subject matter of Claims 27 and 28 uses the terminology "dependencies"

have not been defined in a manner to allow clarity and precision for the purposes of

examining the claim. What does the applicant mean by "dependencies of the rating results" as stated in the specification and claim 27? Are the dependencies based upon the information itself, on how the information is determined to be rated, what the information precision value is? (See MPEP 608.01, 37 CFR 1.75 (d))

     Additionally Claims 45 -49 use the terminology "explicit consideration", for which in the disclosure this term is not defined in a manner to allow clarity and precision for the purposes of examining the claim. The common meanings of the term "explicit" are: clearly expressed, formulated, readily observable, clearly described. Whereas the common meanings of consideration are: deliberation, judgment, factor, decision, treatment, payment. The specification only uses the term and does not define: (para 0029) "The **explicit consideration** of fluctuation of company figures", (para 0030) "explict and complete consideration of the volatilities of...constituents", (para 0061) "valuation ... due to ...explicit consideration of risk....explicit consideration of ...soft facts". The examiner is uncertain as to how to apply the common meanings on the subject matter claimed. By **explicit** does the applicant mean "formulated", "precise", "readily ascertained" and by consideration does the applicant refer to "factors" pertaining to the uncertainties, or a "decision" about the uncertainties, or possibly "a treatment" of the uncertainties. It is unclear to the examiner what the applicant means by this term. (See MPEP 608.01, 37 CFR 1.75 (d)).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

4.   Claims 1-7, 8-14, 16, 21, 27-28, 34, 38, 45-49, 50 are rejected under 35

U.S.C. 112, second paragraph, as being incomplete for omitting essential structural

cooperative relationships of elements, such omission amounting to a gap between the

necessary structural connections. See MPEP § 2172.01. The omitted structural

cooperative relationships are:

In reference to Claims 1-14:

        Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being

incomplete for omitting essential structural cooperative relationships of elements, such

omission amounting to a gap between the necessary structural connections. See

MPEP § 2172.01. The applicant invokes 112 6th paragraph, with "means for

partitioning, specifying, quantifying, entering data, and consolidating" in claims 1-7 and

"means for selecting, specifying, quantifying, entering data, and consolidating". If one

employs means plus function language in a claim, one must set forth in the specification

an adequate disclosure showing what is meant by that language (see MPEP 2181, (II)).

Without corresponding structure in the written disclosure, the applicant has in effect

failed to particularly point out and distinctly claim the invention as required by 112 2nd

paragraph. The only corresponding structure the applicant has disclosed is "floppy disc,

CD, optical disc...computer executable instructions" (para 00145).

The omitted structural cooperative relationships are:

        A structure to partition the corporation, enter data (Claim 1), specifying and

identifying weakness (Claim 3), analyzing collected data (Claim 4), analyzing and

integrating data (Claim 5), consolidating data (Claim 6), reporting data in real time

(Claim 7), disclosed and therefore the invention is not enabled. According to MPEP

2106, an applicant's specification must enable an invention.

A structure to: select data, specify data, quantify, data, enter data, consolidating

data (Claim 8), collect and request data (Claim 9), specify and identify data (Claim 10),

analyze data (Claim 11), analyze and integrated data (Claim 12), consolidate and select

data (Claim 13), report in real time data (Claim 14) are not disclosed and therefore the

invention is not enabled. According to MPEP 2106, an applicant's specification must

enable an invention.

In reference to Claim 2:

Claim 2 is directed toward both an apparatus and method steps and indefinite

under 112 2nd paragraph, an apparatus claim with process steps and merely recites a

use without any active, positive steps delimiting how this use is actually practiced. (see

MPEP 2173.05(q) (II)). For purposes of examination the examiner is viewing the

claimed invention as an apparatus.

In reference to Claim 9:

Claim 9 is directed toward both an apparatus and method steps and is indefinite

under 112 2nd paragraph (see MPEP 2173.05 (II)). The claim upon this claim is

dependent consist of structure and is therefore a machine. However, claim 9 is directed

toward a process step. A single claim which claims both an apparatus and method

steps of using the apparatus is indefinite under U.S.C 112, second paragraph. For

purposes of examination the examiner is viewing the invention claimed an apparatus.

In reference to Claims 16, 49 and 50:

Claims 16, 49 and 50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "specific aspects" in claims 16, 49 and 50, the term is indefinite because the specification does not clearly define the term. (see MPEP 2111 and 37 CFR 1.75 (d)). The examiner will for examination purposes define the term as any component in any data.

In reference to Claim 21:

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 as stated "collecting data ...that checks data", it is unclear to the examiner how collected data can check data. The examiner for examination purposes will apply any method that verifies data to be applied toward the applicants invention.

In reference to Claim 27:

        Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. The subject matter of Claims 27 and 28 uses the terminology,

"dependencies" for which there is an enabling issues in the disclosure and has not been

defined in a manner to allow clarity and precision for the purposes of examining the

claim. What does the applicant mean by "dependencies of the rating results" as stated

in claim 27? Are the dependencies based upon the information itself, are based on how

the information is determined to be rated, what the information precision value is? The

examiner for examination purposes will apply any method that produces a rating result

based on any data.

In reference to Claim 28:

        Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. The subject matter of Claim 28 uses the terminology,

"dependencies" for which there is an enabling issues in the disclosure and has not been

defined in a manner to allow clarity and precision for the purposes of examining the

claim. What does the applicant mean by "dependencies of the valuation results" as

stated in claim 28? Are the dependencies based upon the information itself, are they

based on how the information is determined to be rated, what the information precision

value is? The examiner for examination purposes will apply any method that produces a

rating result based on any data.

In reference to Claim 34:

Claim 34 recites the limitation "valuation result" in line 2. There is insufficient antecedent basis for this limitation in the claim.

In reference to Claim 38:

Claim 34 recites the limitation "valuation object" and "valuation result" in line 2. There is insufficient antecedent basis for this limitation in the claim.

In reference to Claims 45 - 49:

Claims 45-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The terminology "explicit consideration", has enabling issues in that the disclosure does not define this term.

The common meanings of the term "explicit" are: clearly expressed, formulated, readily observable, clearly described. Whereas the common meanings of consideration are: deliberation, judgment, factor, decision, treatment, payment.

The specification only uses the term and does not define: (para 0029) "The **explicit consideration** of fluctuation of company figures", (para 0030) "explicit and complete consideration of the volatilities of…constituents", (para 0061) "valuation … due to …explicit consideration of risk….explicit consideration of …soft facts". The examiner is uncertain as to how to apply the common meanings on the subject matter claimed. By **explicit** does the applicant mean "formulated" or is the meaning "precise", or "readily ascertained" and by **consideration** does the applicant refer to "factors" pertaining to the uncertainties, a "decision about" the uncertainties, a "treatment of" the

uncertainties. It is unclear to the examiner what the applicant means by this term

leaving the claims indefinite in scope.

Claim Rejections - 35 USC § 101

5.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6.   Claims 2 and 9 are rejected under 35 U.S.C 101 because claimed invention is

directed to non-statutory subject matter.

Inreference to Claims 2 and 9:

        Claims 2 and 9 are directed toward neither an apparatus or a process as it

embraces or overlaps two different statutory classes of invention as set forth in 35

U.S.C 101 which is drafted so as to set forth the statutory classes of invention in the

alternative (See MPEP 2173.05 (q)).

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8.   Claims 1-7, 8-14, 15-22, 25-44 and 51-56 are rejected under 35 U.S.C. 102(b) as

being anticipated by US Patent 6374358 B1 by Townsend (Townsend).

In reference to Claim 1:

        A system of producing a rating result for a corporation, comprising:

means for partitioning (Col 7 lines 55-60) the corporation into non-overlapping units;

means for specifying risks, opportunities, and factors (Col 8 lines 22-25) for each of the

non- overlapping units; means for quantifying(Col 8 lines 52-57) expectations,

uncertainties, and correlations associated with the specified risks, opportunities, and

factors (Col 9, lines 18-20); means for entering (Col 8 lines 37-47) into a data

management system including data relating to the quantifications of associated

expectations, uncertainties, and correlations; means for consolidating (Col 8 lines 56-

59) the specified risks and opportunities, including the effects of the uncertainties and

correlations, to thereby produce (col 8 lines 56-63, col 10 lines 14-19) a rating result.

In reference to Claim 2:

     The system as claimed in claim 1 (see rejection of claim 1 above), wherein the

system automatically at least one of collects and requests (Col 8 lines 26-28, 48-53)

data upon an achieved precision of the produced rating result not being sufficient (Col 8,

lines 29-31, Col 7, lines 66-68, Col 8, lines 1-4) .

In reference to Claim 3:

     The system as claimed in claim 1 (see rejection of claim 1 above), wherein the

means for specifying (Col 8 lines 48-54), is also for identifying weaknesses and

strengths of said non-overlapping units.

In reference to Claim 4:

     The system as claimed in claim 2 (see rejection of claim 2 above), further

comprising: means for analyzing (Col 8 lines 20-26, 56-58), collected data, in relation to

reference data, to measure features of the collected data.

In reference to Claim 5:

The system as claimed in claim 2 (see rejection of claim 2 above), further comprising: means for at least one of analyzing and integrating the collected data (Col 8 lines 18-26, 56-58), in relation to known factors, to represent effects of at least one of correlations and interdependencies among the selected quantities

In reference to Claim 6:

The system as claimed in claim 5 (see rejection of claim 5 above) , further comprising: means for consolidating (Col 8 lines 56-63) said selected quantities, including effects of the uncertainties and correlations

In reference to Claim 7:

The system as claimed in claim 1 (see rejection of claim 1 above), further comprising: means for reporting (Col 8 lines 1-2, 34-37, Col 10 lines 14-17) an estimate, in real-time, of an obtainable rating with a current data set of a corporation

In reference to Claim 8:

A system of valuation comprising: means for selecting a partition (Col 8 lines 23-24, 56-58) of a valuation object into non-overlapping units; means for specifying quantities (Col 8 lines 21-28) that represent specific aspects of the non-overlapping units; means for quantifying (Col 7, lines 56-64, Col 8 lines 23-28) the expectations, uncertainties, and correlations associated with the specified quantities; means for entering (Col 8 lines 37-47) into a data management system including data relating to the specified quantities and the quantifications of associated expectations, uncertainties, and correlations; means for consolidating (Col 8, lines 23-28) the

quantities, including the effects of the uncertainties and correlations, to thereby produce

(Col 8, lines 56-63) a valuation result

In reference to Claim 9:

      The system as claimed in claim 8 (see rejection of claim 8 above), wherein the

system automatically at least one of collects and requests data (Col 8 lines 23-31, 54-

58) upon an achieved precision of the produced valuation result not being sufficient.

In reference to Claim 10:

      The system as claimed in claim 8 (see rejection of claim 8 above), wherein the

means for specifying (Col 8 lines 56-58) is also for identifying weaknesses and

strengths of said non-overlapping units.

In reference to Claim 11:

      The system as claimed in claim 9 (see rejection of claim 9 above), further

comprising means for analyzing (Col 8, lines 18-20, 56-58) collected data, in relation to

reference data, to measure (Col 8,lines 23-25, 56-58), features of the collected data

In reference to Claim 12:

      The system as claimed in claim 9 (see rejection of claim 9 above), further

comprising: means for at least one of analyzing and integrating (Col 8, lines 25-29, 54-

58) the collected data, in relation to known factors, to represent effects of at least one of

correlations and interdependencies among the selected quantities

In reference to Claim 13:

The system as claimed in claim 12 (see rejection of claim 12 above), further

comprising: means for consolidating (Col 8, lines 20-28, 54-61) said selected

quantities, including effects of the uncertainties and correlations

In reference to Claim 14:

The system as claimed in claim 8 (see rejection of claim 8 above), further

comprising: means for reporting (Col 8 lines 1-2, 36-37, 56-58, Col 10 lines 14-17) an

estimate, in real-time, of an obtainable valuation with a current data set of a corporation

In reference to Claim 15:

A method of producing a rating result for a corporation, comprising: selecting a

partition of the corporation into non-overlapping units (state 100) (Fig. 1, Col 3 lines 1-

15); entering into a data management system relating to risks, opportunities, and factors

for said non-overlapping units (Col 3 lines 34-45), including data relating to

quantifications of expectations, uncertainties, and correlations associated with the risks,

opportunities, and factors; consolidating the risks and opportunities (Col 3, lines 36-45),

including the effects of the uncertainties and correlations (Col 3 lines 54-56), to thereby

produce a rating result (Col 7 lines 1-3, Fig 1, Col 8 lines 1-4).

In reference to Claim 16:

A method of valuation comprising the steps of: selecting a partition of a valuation

object into non-overlapping units (state 100) (Fig. 1, Col 3 lines 1-15, 34-38); entering

into a data management system (Col 3 lines 34-45), including data relating to quantities

representing specific aspects of the non-overlapping units (Col 3, lines 36-45), including

data relating to quantifications of expectations, uncertainties, and correlations of the

quantities (Col 3 lines 55-56) consolidating the quantities (Col 3, lines 36-45), including the effects of the uncertainties and correlations, to thereby produce a valuation result (Col 7 lines 1-3, Fig 1).

In reference to Claim 17:

The method of claim 15 (see rejection of claim 15 above) wherein the selecting includes constraining selection to partitions (Fig. 1, Col 3, lines 1-7, Col 8, lines 1-3) along one level in an organizational hierarchy of the corporation (Fig 3-4, Col 4 lines 1-13).

In reference to Claim 18:

The method of claim 16 (see rejection of claim 16 above) wherein the selecting includes constraining selection to partitions (Fig. 1, Col 3, lines 1-9) along one level in an organizational hierarchy of the valuation object (Fig. 3-4, Col 4 lines 1-13).

In reference to Claim 19:

The method of claim 15 (see rejection of claim 15 above), wherein the expectations, uncertainties, and correlations are quantified (Col 3, lines 34-45) in form of probability distributions (Col 3, lines 53-56).

In reference to Claim 20:

The method of claim 16 (see rejection of claim 16 above), wherein the expectations, uncertainties, and correlations are quantified (Col 3, lines 4-9, 34-45) in form of probability distributions (Col 3, lines 53-64).

In reference to Claim 21:

The method of claim 15 (see rejection of claim 15 above), further comprising interactively and iteratively collecting data (Fig 1 steps 160 to 165)relating to the corporation that checks data for completeness and consistency(Col 6, lines 61-65).

In reference to Claim 22:

The method of claim 16 (see rejection of claim 16 above), further comprising interactively and iteratively collecting data (Fig 1 steps 160 to 165)relating to the valuation object that checks data for completeness and consistency (Col 6, lines 61-65).

In reference to Claim 25:

The method of claim 15 (see rejection of claim 15 above), wherein a precision of the rating result is also produced (Fig 4, Fig 6; Col 4 lines 1-15, Col 5 lines 24-33).

In reference to Claim 26:

The method of claim 16 (see rejection of claim 16 above), wherein a precision of the valuation result is also produced (Fig 4, Fig 6; Col 4 lines 1-15, 30-35, Col 5 lines 24-33).

In reference to Claim 27:

The method of claim 15 (see rejection of claim 15 above), wherein information regarding dependencies of the rating result is also produced(Fig 4, Fig 6; Col 4 lines 1-15, 30-35, Col 5 lines 24-33).

In reference to Claim 28:

The method of claim 16 (see rejection of claim 16 above), wherein information regarding dependencies of the valuation result is also produced (Fig 4, Fig 6; Col 4 lines 1-15, 30-35, Col 5 lines 24-33).

In reference to Claim 29:

The method of claim 15 (see rejection of claim 15 above), wherein a formula is also produced (Col 4, lines 53-59, Col 5, lines 37-40, Col 6, lines 45-50, Col 7 lines 15-30), including functions of at least one of factors and ratios (Col 4 lines 63-10) that approximate the rating result with calculable precision

In reference to Claim 30:

The method of claim 16 (see rejection of claim 16 above), wherein a formula is also produced (Col 4, lines 53-59, Col 5, lines 37-40, Col 6, lines 45-50, Col 7 lines 15-30), including functions of at least one of factors and ratios (Col 4 lines 63-10) that approximate the rating result with calculable precision

In reference to Claim 31:

The method of claim 15 (see rejection of claim 15 above), further comprising: analyzing (Col 3 lines 50-57) the non-over-lapping units with an expert system (Col 4, lines 1-8).

In reference to Claim 32:

The method of claim 16 (see rejection of claim 16 above), further comprising: analyzing (Col 3 lines 50-57) the non-over-lapping units with an expert system (Col 4, lines 1-8).

In reference to Claim 33:

The method of claim 15 (see rejection of claim 15 above), further comprising: storing the rating result (Col 4 lines 5-14) in a database (Col 3, lines 66-67)

In reference to Claim 34:

The method of claim 15 (see rejection of claim 15 above), further comprising:

storing the valuation result (Col 4 lines 5-14) in a database(Col 3, lines 66-67).

In reference to Claim 35:

The method of claim 15 (see rejection of claim 15 above), further comprising:

distributing the rating result by at least one of a local and global computer network (Col

7, lines 60-65).

In reference to Claim 36:

The method of claim 16 (see rejection of claim 16 above), further comprising:

distributing the valuation result by at least one of a local and global computer network

(Col 7, lines 60-65).

In reference to Claim 37:

The method of claim 15 (see rejection of claim 15 above), further comprising:

optimizing the corporation based on the rating result (Col 8, lines 1-5).

In reference to Claim 38:

The method of claim 15 (see rejection of claim 15 above), further comprising:

optimizing the valuation object based on the valuation result (Col 8, lines 1-5).

In reference to Claim 39:

The method of claim 31 (see rejection of claim 31 above), wherein the expert

system compares the non-overlapping units with benchmark units (Col 7 lines 34-37).

In reference to Claim 40:

The method of claim 32 (see rejection of claim 32 above), wherein the expert

system compares the non-overlapping units with benchmark units (Col 7 lines 34-37).

In reference to Claim 41:

The method of claim 31 (see rejection 31 of claim above), wherein the expert system (Col 4, lines 1-8) identifies at least one of the weaknesses, strengths, risks, opportunities, and factors of the non-overlapping units (Col 4, lines 20-24).

In reference to Claim 42:

The method of claim 32 (see rejection of claim 32 above), wherein the expert system (Col 4, lines 1-8) identifies at least one of the weaknesses, strengths, risks, opportunities, and factors of the non-overlapping units (Col 4, lines 20-24).

In reference to Claim 43:

The method of claim 31 (see rejection of claim 31 above), wherein the expert system (Col 4, lines 1-8) derives suggestions to optimize at least one of operation, performance, and competitiveness of the non-overlapping units (Col 4 lines 1-3).

In reference to Claim 44:

The method of claim 32 (see rejection of claim 32 above), wherein the expert system (Col 4, lines 1-8) derives suggestions to optimize at least one of operation, performance, and competitiveness of the non- overlapping units (Col 4 lines 1-10).

In reference to Claim 51:

A computer-readable medium (Col 8, lines 20-35) comprising computer executable instructions (Col 8, lines 27-28) configured to cause a computer device to perform the method of claim 15 (Col 8, lines 55-58).

In reference to Claim 52:

A computer-readable medium (Col 8, lines 20-35) comprising computer executable instructions (Col 8, lines 27-28) configured to cause a computer device to perform the method of claim 16 (Col 8, lines 55-58).

In reference to Claim 53:

A system of producing a rating for a corporation, comprising: means for specifying at least risks and opportunities (Col 8 lines 23-25) for non-overlapping units of the corporation(Col 8 lines 23-24); means for quantifying (Col 8 lines 20, 52-53, 56-57) at least uncertainties and correlations associated with the risks and opportunities (Col 3, lines 19); means for consolidating the risks and opportunities, including the effects of the uncertainties and correlations(Col 3, lines 9-16), to produce the rating (Col 3, lines 9-16, Fig 4, Col 4 lines 1-5, Col 8 lines 1-3).

In reference to Claim 54:

The system of claim 53 (see rejection of claim 52 above), wherein the means for consolidating includes a data management system (Col 3, lines 9-16) including data relating to the specified quantifications of uncertainties and correlations (Col 3, lines 1-3, 7-9).

In reference to Claim 55:

A system of valuation comprising: means for specifying quantities (Col 8 lines 23-25) representing specific aspects of non-overlapping units of a valuation object (Col 3, lines 9-15); means for quantifying at least uncertainties, and correlations associated with the specified quantities(Col 8 lines 20, 52-53, 56-57); means for consolidating the

quantities (Col 3, lines 10-16), including the effects of the uncertainties and correlations,

to produce a valuation(Col 3 , lines 52-65).

In reference to Claim 56:

        The system of claim 55 (see rejection of claim 55 above), wherein the means for

consolidating includes a data management system (Col 3, lines 9-16) including data

relating to the specified quantities and the quantifications of associated uncertainties

and correlations(Col 3 , lines 52-65).

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

10.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

11.   Claims 23-24 and 45-50 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Patent No. 6374358 by Townsend (Townsend) .

In reference to Claim 23:

Townsend teaches:

The method of claim 19 (see rejection of claim 19 above), wherein the

consolidating (Col 4 lines 30-37).

However Townsend does not teach:

includes integrating an equivalent of multidimensional probability distributions

Although Townsend does not teach explicitly of integrating multidimensional

probability distributions, this prior art does teach, however, a multidimensional formula

((Townsend) Col 5 lines 37-50). Each probability indicates a grouping of data. An

efficient representation of probability density function is a model consisting of several

components, such as a model consisting of the sum of probabilities or Guassians as is

shown by Townsend. It is well known that any distribution can be approximated

accurately with a mixture model containing a sufficient number of components. Data

represented by multivariate probabilities are easy to integrate with numerical models for

efficient grouping of large volumes of data. It would have been obvious to one of

ordinary skill in the art at the time of the invention for Townsend to integrate groups of

probabilities of data that were related to create a more condensed probability of

targeted data.

In reference to Claim 24:

Townsend teaches:

The method of claim 20 (see rejection of claim 20 above), wherein the

consolidating (Col 4 lines 30-37).

However Townsend does not teach:

includes integrating an equivalent of multidimensional probability distributions

Although Townsend does not teach explicitly of integrating multidimensional probability distributions, this prior art does teach, however, a multidimensional formula ((Townsend) Col 5 lines 37-50). Each probability indicates a grouping of data. An efficient representation of probability density function is a model consisting of several components, such as a model consisting of the sum of probabilities or Guassians as is shown by Townsend. It is well known that any distribution can be approximated accurately with a mixture model containing a sufficient number of components. Data represented by multivariate probabilities are easy to integrate with numerical models for efficient grouping of large volumes of data. It would have been obvious to one of ordinary skill in the art at the time of the invention for Townsend to integrate groups of probabilities of data that were related to create a more condensed probability of targeted data.

In reference to Claim 45:

Townsend teaches:

The method of claim 15 (see rejection of claim 15 above)

However Townsend does not teach:

wherein more than 20 individual risks of the corporation, including any constituents, are consolidated with explicit consideration and consolidation of uncertainties and correlations

Townsend does not teach specifically of a certain number of risks, however Townsend teaching does include lists of risks a company should consider (Col 3, lines 1-15). Townsend also teaches of different probabilities of business concerns (Col 3, lines 51-65)

Additionally, Townsend does not teach explicitly of consolidating factors. However, Townsend does teach business concerns represented by probabilities (Co 3, (Col 5, lines 35-48). It is well known that probabilities are a collection of data representing a specific concern, (e.g. a consolidation of factors). The applicant does not state why 20 is conditional to the method and how that specific number would affect the results. Consequently, there is no particular relevance to this unit with the invention.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to include in the rules taught by Townsend, any minimum limit number including a minimum of "20 individual risk" to create a collection of data to be represented by a probability.

In reference to Claim 46:

Townsend teaches:

The method of claim 16 (see rejection of claim 16 above),

Townsend does not teach:

wherein more than 20 individual risks of the valuation object are consolidated with explicit consideration and consolidation of uncertainties and correlations

The applicant does not state why 20 is conditional to the method and how that specific number would affect the results. Although, Townsend does not teach

specifically of a certain number of risks, however Townsend teaching does include lists

of risks a company should consider (Col 3, lines 1-15). Townsend also teaches of

different probabilities of business concerns (Col 3, lines 51-65)

Additionally, Townsend does not teach explicitly of consolidating factors.

However, Townsend does teach business concerns represented by probabilities (Co 3,

(Col 5, lines 35-48). It is well known that probabilities are a collection of data

representing a specific concern, (e.g. a consolidation of factors). The applicant does

not state why 20 is conditional to the method and how that specific number would affect

the results. This does not deem this particular unit with any relevance.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention, to include in the rules taught by Townsend, any limiting number

including a minimum of "20 individual risk" to create a collection of data to be

represented by a probability.

In reference to Claim 47:

Townsend teaches:

The method of claim 15 (see rejection of claim 15 above),

Townsend does not teach:

wherein more than 10 individual risks and 5 opportunities of the corporation,

including any constituents, are consolidated with explicit consideration and

consolidation of uncertainties and correlations

Townsend does not teach of a specific number of risks or opportunities, however

Townsend teaching does include lists of risks a company should consider (Col 3, lines

1-15). Townsend also teaches of different probabilities of business concerns (Col 3,

lines 51-65)

Additionally, Townsend does not teach explicitly of consolidating factors.

However, Townsend does teach business concerns represented by probabilities (Co 3,

(Col 5, lines 35-48). It is well known that probabilities are a collection of data

representing a specific concern, (e.g. a consolidation of factors). The applicant does

not state why "10 individual risk and 5 opportunities" are conditional to the method and

how that specific number would affect the results. The claim does not deem this

particular unit with any relevance to the invention.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention, to include in the rules if needed as taught by Townsend, any

limiting number as well as "more than 10 individual risks and 5 opportunities" to compile

together into data sets (Col 3, lines 50-52, Col 4, lines 20-24).

In reference to Claim 48:

Townsend teaches:

The method of claim 16 (see rejection of claim 16 above),

Townsend does not teach:

wherein more than 10 individual risks and 5 opportunities of the valuation object

are consolidated with explicit consideration and consolidation of uncertainties and

correlations

Townsend does not teach of a specific number of risks or opportunities, however

Townsend teaching does include lists of risks a company should consider (Col 3, lines

1-15). Townsend also teaches of different probabilities of business concerns (Col 3,

lines 51-65)

Additionally, Townsend does not teach explicitly of consolidating factors.

However, Townsend does teach business concerns represented by probabilities (Co 3,

(Col 5, lines 35-48). It is well known that probabilities are a collection of data

representing a specific concern, (e.g. a consolidation of factors). The applicant does

not state why "10 individual risk and 5 opportunities" are conditional to the method and

how that specific number would affect the results. The claim does not deem these

specific numbers of these specific units with any relevance to the invention.

Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention, to include in the rules if needed as taught by Townsend, any

limiting number as well as "more than 10 individual risks and 5 opportunities" to compile

together into data sets (Col 3, lines 50-52, Col 4, lines 20-24).

In reference to Claim 49:

Townsend teaches:

The method of claim 15 (see rejection of claim 15 above), ... representing

specific aspects of corporation, including any constituents (Col 3, lines 20-24, 34-37),

are consolidated with explicit consideration and consolidation of uncertainties and

correlations (Col 5 lines 37-39)

Townsend does not teach:

wherein more than 10 different quantities

Townsend does not teach of a specific number of quantities, however Townsend
teaching does include lists of risks a company should consider (Col 3, lines 1-15). The
applicant does not state why "more than 10 different quantities" is conditional to the
method and how that specific number would affect the results. Therefore, it would have
been obvious to one of ordinary skill in the art at the time of the invention, to include in
the rules if needed as taught by Townsend, in the rules any number as well as "more
than 10 different quantities" compile together into data sets (Col 3, lines 50-52, Col 4,
lines 20-24).

<u>In reference to Claim 50:</u>

Townsend teaches:

The method of claim 16 (see rejection of claim 16 above), ... representing
specific aspects of the valuation object are consolidated with explicit consideration and
consolidation of uncertainties and correlations(Col 5 lines 37-39).

Townsend does not teach:

wherein more than 10 different quantities

Townsend does not teach of a specific number of quantities, however Townsend
teaching does include lists of risks a company should consider (Col 3, lines 1-15). The
applicant does not state why "more than 10 different quantities" is conditional to the
method and how that specific number would affect the results. Therefore, it would have
been obvious to one of ordinary skill in the art at the time of the invention, to include in
the rules if needed as taught by Townsend, in the rules any number as well as "more

than 10 different quantities" compile together into data sets (Col 3, lines 50-52, Col 4,

lines 20-24).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mary M. Gregg whose telephone number is (571) 270-

5050. The examiner can normally be reached on Monday thru Friday-8:30am-5:30pm

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ken Bomberg can be reached on (571) 272-4922. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. M. G./
Examiner, Art Unit 4124

/Thor S. Campbell/

Primary Examiner, Art Unit 3742